Healthpoint

Information from the Division of Health Care Finance and Policy

Division of Health Care Finance and Policy

Two Boylston Street
Boston, MA 02116
(617) 988-3100

Louis I. Freedman
Commissioner

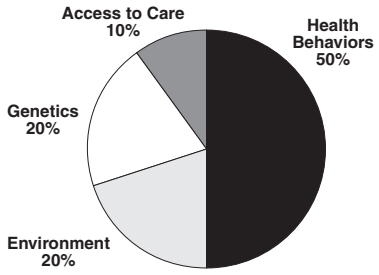
Number 21 April 2001

CHRONIC ILLNESS—ACUTE SYSTEM

The current paradigm of health care delivery dates back to an era in which the typical patient suffered from an acute, usually infectious, illness. Today, however, almost half of the United States population suffers from one or more chronic diseases—conditions that are prolonged, do not resolve spontaneously and are rarely cured completely. Accounting for more than three-quarters of direct medical expenditures,[1] these illnesses cause the majority of deaths in the United States.[2] Effective care of chronic illness requires management that is multifaceted and often of lifelong duration. In contrast, acute illness usually calls for discreet and time limited medical intervention. Although the health care delivery system responds relatively well to the medical needs (as narrowly defined) of chronically ill patients, it has not evolved to encompass the additional components of care that these patients need. This issue of *Healthpoint* examines this disparity and its implications for health care in Massachusetts.

Recognizing that modifiable behaviors account for the majority of morbidity today, treatment guidelines for most high prevalence chronic diseases call for some combination of medical intervention and monitoring, behavior change, and adherence to long-term pharmaceutical therapy. The goal of treatment is to improve patient functioning and quality of life, with the patient called upon to assume responsibility for day-to-day management of the disease.

Determinants of Health[3]



Source: IFTF; Centers for Disease Control and Prevention

Research has shown that for many patients, lack of support for behavior change and adherence to medication regimens prevents medical therapies from achieving their maximum benefit. Highly Active Anti-Retroviral Therapy (HAART) for HIV epitomizes the complicated, long-term pharmaceutical regimens increasingly characteristic of disease treatment. While HAART has produced dramatic improvement in mortality and a decline in opportunistic infection rates among HIV-infected patients, the long-term success of these drugs is contingent on full viral suppression. In clinical trials, between 80% and 90% of patients receiving HAART achieve and maintain undetectable viral loads. Yet, in clinical practice, less than 50% of patients achieve this goal. The major reason for this apparent difference in drug

efficacy is medication nonadherence.[4] But difficulty persevering with the demands of a therapy is not unique to HIV. Rather, it is the norm for a range of chronic diseases including congestive heart failure (CHF) and hypertension.

Medication Compliance Rates for Selected Illnesses[5]

Various medications for diabetes and CHF	69%
Antihypertensives	53%
Antipsychotics for schizophrenia	42%

These statistics reflect the challenge of drug adherence, a single component in a repertoire of skills and behaviors necessary to manage chronic illness. In conjunction with medical treatment, however, consistent self-care lessens the rate of serious complications—without it, medical treatment is only partially successful at best. The diabetes self-care checklist below illustrates the breadth and complexity of these tasks and shows why learning and adopting these behaviors is far from easy.

Although advances in biomedical research receive more public attention, there is a growing body of knowledge about successful behavior change and promotion of self-care within the context of chronic illness. Experts have identified the following components as essential:

Diabetes Self-Care Checklist[6]

- Monitoring blood glucose
- Taking medication (including dosage-adjustment)
- Planning meals
- Exercising
- Managing complications
- Dealing with special situations (sick days, management of high and low blood sugars)
- Participating in preventive care (eye care, foot care, dental care)
- Communicating with health professionals
- Scheduling and attending appropriate monitoring and follow-up care visits

Collaborative Definition of Problems

Problems identified by patient are addressed in concert with physician diagnosis.

Targeting, Goal Setting and Planning

Patient and provider focus on a specific problem, set realistic objectives, and develop an action plan for attaining those objectives in the context of patient preferences and readiness.

Creation of a Continuum of Self-Management Training and Support Services

Patient has access to services that teach skills needed to carry out medical regimens, guide health behavior changes, and provide emotional support.

Active and Sustained Follow-Up

Patient is contacted at specified intervals to monitor health status, to identify potential complications, and to reinforce progress in implementing the care plan.[7]

Applying Theory to Practice

While Massachusetts has several well known programs addressing the intimate connection between stress and physical health, these programs don't address the gamut of behaviors exacerbating chronic illness. As discrete programs or institutes, they fall outside the realm of routine health care. Moreover, participation in and insurance coverage for these programs is based on clinical evidence of disease rather than the upstream goal of disease prevention. The situation in Massachusetts is not unique. In January, the Washington-based Center for the Advancement of Health released a Robert Wood Johnson Foundation-funded report, *Health Behavior Change in Managed Care*, which found that managed care plans' integration of strategies to help people change lifestyle behaviors "is limited and piecemeal." Following interviews with HMO medical directors, the center found that

plans' offerings in behavioral change often are passive and fragmented, that access tends to be tied to a documented medical condition rather than to disease prevention, and that when offered, such programs usually require out-of-pocket expense to members.[8]

While there is general agreement on the importance of educating and supporting the chronically ill patient, and even some knowledge of how to do that effectively, the health care delivery system has not evolved to do this actively. Indeed, payer, provider and patient inadvertently sustain and reinforce a narrow medical approach to illness. Behavioral regimens are harder to quantify and evaluate than clinical interventions. The benefits of behavioral change are incremental, with any cost savings from risk reduction accruing far in the future. This problem of delayed cost benefit is as much a challenge for public payers as for private.

It is inefficient to use a physician's training or time to provide the kind of ongoing support that most people need to comply with long-term pharmaceutical regimens or dramatic behavior changes. For this type of help, nurse practitioners, physician assistants, social workers, pharmacists and in some cases peers, are a logical and more cost effective choice. However, broad acceptance and utilization of allied health professionals in this country generally has not occurred outside of three specific settings: when doctors are in short supply, when individuals have intractable conditions, and in general pediatric care. We can look to pediatric care as a model in particular because it is an example of a collaborative care approach applied to primary care in a general population.

Reasons for widespread use and acceptance of multidisciplinary staffing in pediatrics include:

- high volume of visits
- high demand for child guidance/parental education
- recognition of the need for collaboration with behavioral and developmental care providers such as psychologists, nutrition specialists, counselors, etc.
- emphasis on wellness and preventative care through check-ups and well child visits
- historic link to the public health system, e.g. vaccination practices[9]

Integrated care teams have great potential for the adult population with modifiable health risks since effective management and prevention of chronic illness share many of these same attributes.

Challenges for Massachusetts

Ironically, Massachusetts' supremacy in tertiary medicine has been a barrier to acceptance of a more collaborative, multi-dimensional approach to care. Massachusetts consumers have grown accustomed to seeking "the best of the best," as they define it, without realizing that what they might need to help manage their illness is not necessarily best delivered by the same teaching hospital specialist who diagnosed and stabilized their condition. Teaching hospitals and specialists are abundant here, and in the absence of generally agreed upon quality indicators, technically oriented medical care delivered by physicians is perceived as "better" than less sophisticated, though often more appropriate, therapies and regimens.

At the same time, Massachusetts has unique attributes conducive to improving the system of care for chronic illness. Massachusetts has the highest managed care penetration rate in the country, coupled with a high degree of consolidation in the HMO market. Our state also has a strong and relatively well-funded public health system. Three years ago, payers worked with each other and with government to transform the delivery of preventative care. The chief medical officers of Tufts Health Plan, Harvard Pilgrim Health Care, Fallon Community Health Plan, Neighborhood Health Plan, and Blue Cross Blue Shield of Massachusetts formed their own separate 501(c)(3) charitable

organization, the Alliance for Healthcare Improvement. This group develops preventive care programs endorsed by all five health plans and the Massachusetts Department of Public Health, reducing duplication, improving cost-effectiveness, and reinforcing a single message.[10]

Massachusetts took an additional step forward last year by passing legislation (albeit the 36th state to do so) requiring insurance companies to cover diabetic supplies and outpatient education and counseling for diabetes patients. The Diabetes Cost Reduction Act mandates insurance coverage for much needed self-care and disease management resources for people with diabetes.[11]

Although a mandated benefit can be a powerful tool for increasing access to vital services, it applies only to a limited population and is a disease by disease approach to a problem requiring a systemic solution. Ultimately, transforming the health care system to address the demands of chronic illness requires action across community, organization, practice and patient lines.

Endnotes

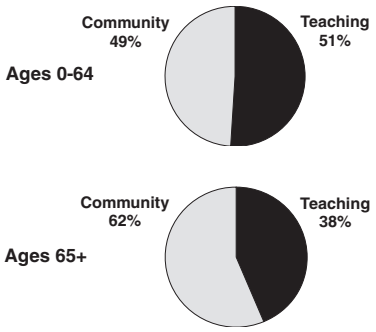
1. Hoffman, Catherine ScD, Rice D, Sung HY. "Persons with Chronic Conditions: Their Prevalence and Costs." *JAMA,* November 1996.
2. *Chronic Diseases and Their Risk Factors: The Nation's Leading Causes of Death, 1999.* National Center for Chronic Disease Prevention and Health Promotion, http://www.cdc.gov/nccdphp/statbook/
3. *Health and Health Care 2010: The Forecast, The Challenge.* Report by the Institute for the Future commissioned by the Robert Wood Johnson Foundation, March 2000.
4. Cheever, Laura MD, Health Resources and Services Administration (HRSA). *Adherence: Issues and Strategies,* Medscape HIV/AIDS: Annual Update, 2000.
5. Dezii, Christopher M. RN, MBA, Health Economics and Outcomes Group, MHC, Bristol-Myers Squibb Co. "Medication Noncompliance: What *Is* the Problem?" *Managed Care* (supplement), September 2000.
6. The American Association of Clinical Endocrinologists Medical Guidelines for the Management of Diabetes Mellitus: The AACE System of Intensive Diabetes Self-Management, 2000 update. *Endocrine Practice,* January/February 2000.
7. Von Korff, Michael ScD and Gruman, Jessie PhD et al. "Collaborative Management of Chronic Illness." *Annals of Internal Medicine*, December 15, 1997.
8. "Health Behavior Change in Managed Care." Center for the Advancement of Health, 2000, http://www.cfah.org/
9. "The Future of Pediatric Education II: Organizing Pediatric Education to Meet the Needs of Infants, Children, Adolescents, and Young Adults in the 21st Century." *Pediatrics,* 105(1) supplement, January 2000, part 2 of 3.
10. Dalzell, Michael D. "Obesity in America: Where Society Failed, Can Health Plans Succeed?" *Managed Care,* March 2000.
11. Chapter 81 of the Acts of 2000: An Act Relative to Diabetes Cost Reduction (see Senate, No. 2109, amended). Approved by the Governor on May 4, 2000.

Did you know?

Younger Patients Are Choosing Teaching Hospitals

Today, despite the fact that the hospitalized elderly almost always require more complex care than younger hospitalized patients, they use community hospitals for more of their care than do younger patients. The decade from 1990 to 1999 saw community hospital use remain constant for those over age 65 but dramatically decline (32%) for those ages 0-64. Use of community hospitals as a proportion of *total* hospitalizations has decreased in both age groups however, indicating that while the trend is to favor higher cost teaching hospitals, younger patients are migrating to them more rapidly. The increased reliance on teaching hospitals by Massachusetts residents, particularly for primary and secondary care, has added to the fiscal crisis of our health care system. Care provided by teaching hospitals is typically more expensive than comparable level care provided by community hospitals.

Distribution of Hospital Discharges by Patient Age and Hospital Type, 1999



Source: Division of Health Care Finance and Policy

Victoria Nixon
Author

Maria Schiff
Series Editor

Heather Shannon
Layout and Production

Dorothy Barron
Distribution and Library